

- 1. Pipe sizes and slopes: per plans.
- 2.The pipe supports and the restrictor/separator shall be constructed of the same material and be anchored at a maximum spacing of 36 inches. Attach the pipe supports to the manhole with 5/8 inch stainless steel expansion bolts or embed the supports into the manhole
- 3. The vertical riser stem of the restrictor/separator shall be the same diameter as the horizontal outlet pipe with a minimum diameter of 8 inches.
- 4. The flow restrictor/separator shall be fabricated from one of the following materials:
  - 0.064 inch Corrugated Aluminum Alloy Drain Pipe
  - 0.064 inch Corrugated Galvanized Steel Drain Pipe with Treatment 1
  - 0.064 inch Corrugated Aluminized Steel Drain Pipe
  - 0.060 inch Aluminum alloy flat sheet, in accordance with ASTM B 209M, 5052 H32 or EPS
  - High Density Polyethylene Storm Sewer Pipe
- 5.The frame and ladder or steps are to be offset so that: the shear gate is visible from the top; the climb down space is clear of the riser and gate; the frame is clear of the curb.
- 6.The multi orifice elbows may be located as shown, or all placed on one side of the riser to assure ladder clearance. The size of tie elbows and their placement shall be specified in the plans.
- 7. Restrictor plate with orifice as specified in the plans. Omit plate if for oil pollution control only. The opening is to be cut round and smooth.
- 8. The shear gate shall be comprised of the following:
- \* Constructed of aluminum alloy in accordance with ASTM B 26M and ASTM B 275, designation ZG32A; or cast iron in accordance with ASTM A 48, Class 30B.
- \* The lift handle shall be made of a similar metal to the gate (to prevent galvanic corrosion), it may be of solid rod or hollow tubing, with adjustable hook as required.
- \* A neoprene rubber gasket is required between the riser mounting flange and the gate flange.
- \* Install the gate so that the level line mark is level when the gate is closed.
- \* The mating surfaces of the lid and the body shall be machined for proper fit.
- \* All shear gate bolts shall be stainless steel.
- 9.The shear gate maximum opening shall be controlled by limited hinge movement, a stop tab, or some other device.
- 10. Alternate shear gate designs are acceptable, if material specifications are met and flange bolt pattern matches.
- 11. Outlet coupling to existing pipes or to dissimilar pipe types per direction by City of Lynnwood.
- 12. Installation to meet WSDOT standards for type II installation.



MULTI ORIFICE FLOW CONTROL

I:\Standard Plans

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